

## Claims

1. An antireflection film comprising an antireflection layer being formed at least on one side of a transparent base film directly or through an other layer,

wherein the antireflection layer is made of at least two kinds of low refractive index materials satisfying a relationship of refractive index:  $n_d^{20} \leq 1.49$ .

2. The antireflection film according to Claim 1, wherein the antireflection layer has a separated structure in which mutually different areas are formed.

3. The antireflection film according to Claim 2, wherein the separated structure has a continuous matrix with dispersed phase structure.

4. The antireflection film according to Claim 2 or Claim 3, wherein a size of a short area in the separated structure is in a range of 5 to 1,000 nm.

5. The antireflection film according to any of Claim 1 to Claim 4, wherein the antireflection layer is formed of an area made of a material having fluorine as a principal component and an area made of a polysiloxane structure as a principal component.

6. The antireflection film according to any of Claim 1 to Claim 5, wherein the antireflection layer is formed through a hard coat layer.

**7. The antireflection film according to any of Claim 1 to Claim 5, wherein the antireflection layer has an uneven shape and antiglare property.**

**8. The antireflection film according to Claim 7, wherein the antireflection layer is formed through a hard coat layer in which particles are dispersed and the uneven shape surface is formed with the particles.**

**9. The antireflection film according to Claim 7 or Claim 8, wherein a 60° glossiness of a surface of the antireflection layer is 20 to 120%.**

**10. The antireflection film according to Claim 7 to Claim 9, wherein a Haze value is 10 to 60%.**

**11. A polarizing plate comprising a polarizer and a protective film being formed on one side or both sides of the polarizer,**

**wherein a transparent base film of the antireflection film according to any of Claim 1 to Claim 10 is formed on one side or both sides of a polarizer as the protective film.**

**12. An optical element comprising the antireflection film according to any of Claim 1 to Claim 10 or the polarizing plate according to Claim 11.**

**13. An image viewing display comprising the antireflection film according to any of Claim 1 to Claim 10, the polarizing plate according to Claim 11 or the optical element according to Claim 12.**

**14. A method for manufacturing an antireflection film comprising an antireflection layer being formed at least on one side of a transparent base film directly or through an other layer, comprising the steps of:**

5       **coating a coating liquid including at least two kinds of low refractive index materials satisfying a relationship of refractive index:  $n_d^{20} \leq 1.49$  dissolved in a solvent; and**

**drying a coated layer to give the of the antireflection layer.**

10       **15. The method for manufacturing the antireflection film according to Claim 14, wherein the low refractive index material comprises a material having fluorine and a polysiloxane forming material, and the solvent is a mixed solvent comprising a ketone solvent and an alcohol solvent.**